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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,962	01/19/2001	Seiichi Aoyagi	112857-246	9153

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EXAMINER	
NOLAN, DANIEL A	
ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,962	AOYAGI ET AL.	
	Examiner	Art Unit	
	Daniel A. Nolan	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2004* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *18-23* is/are allowed.

6)☒ Claim(s) *12-17 and 24-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

2. The filing of 01 March 2004 was applied with the effect that the claims were changed as indicated and examined on the merits.

Response to Arguments

3. Applicant's arguments filed 01 March 2003 have been fully considered but they are not persuasive.

- In response to applicant's argument that the prior art of *Cox, Jr.* does not address the same or even a similar problem as the claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).
- In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the problem of establishing preferences introduced by the instant application and the reference of Cox, Jr. would make it obvious to a person of ordinary skill in the art to search for and find the disclosure of Herz *et al*[195] in the field of speech signal processing. See Ruiz v. A.B. Chance Co. 03-1333, 29 Jan 2004, USPQ2D 1686.

Claim Rejections - 35 USC § 103

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Cox, Jr. & Herz *et al*[195]

5. Claims 12-14 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, Jr. in view of Herz *et al*[195] (U.S. Patent 6,029,195 A).

6. Regarding claims 12 and 24, in *providing a linguistically competent dialogue with a computerized service representative,* Cox, Jr. reads on every feature of the *information processing apparatus for collecting information regarding a user* in the immediate application as follows:

- Cox, Jr. (the "*utterance recognition*" of column 3 line 60) reads on the feature of a *speech recognizing means for recognizing speeches of the user;*
- Cox, Jr. (14 in figure 1) reads on the feature of a *dialog sentence creating means for creating a dialog sentence* (column 2 lines 32-33) *to exchange a dialog with the user* (column 4 lines 33-35) *based on a result of the speech recognition performed by said speech recognizing means;*
- Cox, Jr. (column 4 lines 14-16) reads on the feature of a *collecting means for collecting the user information based on the speech recognition result.*

Where Cox, Jr. is silent on the matter of *accounting or statistical operations*, Herz *et al*[195], with the invention *for customized electronic identification of desirable objects* reads on the feature that *counts a number of times the same topic* (column 13 lines 55-59) of claim 12 – as well as reading on *the number of appearances that the same topic is included in the speech of the user* of claim 24 – *is included in the speech of the user*

based on the speech recognition result and collects (column 13 lines 29-35) *the user information based on the counted number.*

Herz *et al*'195 further teaches alternatives (column 14 lines 16-18), making the simple count obvious as the simplest "unweighted" limit or *threshold.* As such, the requirement for such a practical application of collecting preferences and matching to service would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Herz *et al*'195 to the device/method of Cox, Jr. so as to assist customers in making selections.

With regard for the added limitations of claim 24, Cox, Jr. does not mention *thresholds.* Herz *et al*'195 reads on the feature of *a speech threshold* (as the *score* of column 12 lines 59-60) *including a designated number of appearances of a topic in the speech of a user* (as contributed by column 13 lines 56-58) and the further feature that *determines whether the counted number of appearances of the topic is equal to or greater than the speech threshold* (the *score,* where the accumulated score is detailed in column 13 lines 55-59 & column 14 lines 1-63 – see column 51 lines 28-35) and collects the user information (see Cox, Jr., column 4 lines 14-16) *when the counted number of appearances of the topic is equal to or greater than the speech threshold.*

Because relative selection criteria requires postponing the decision until all materials are analyzed, it would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Herz *et al*'195 to the device/method of Cox, Jr. to make the selection at the earliest indication that the criteria would be met.

7. Regarding claims 13 and 25; the claims are set forth with the same features as claims 12 and 24, respectively. Cox, Jr. (figure 1 items 10-12) reads on the feature of *storing the user information.*

8. Regarding claims 14 and 26; the claims are set forth with the same features as claims 12 and 24, respectively. Cox, Jr. (figure 1 item 14) reads on the feature that *said dialog sentence creating means outputs the dialog sentence in the form of a text or synthesized sounds.*

Cox, Jr., Herz *et al*[195] & Von Kohorn

9. Claims 15-16 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, Jr. in view of Herz *et al*[195] and further in view of Von Kohorn (U.S. Patent 5,916,024 A).

10. Regarding claim 15 and 27; the claims are set forth with the same features as claims 12 and 24, respectively. Neither Cox, Jr. nor Herz *et al*[195] deal with *frequency of words in speech.* Von Kohorn (332 figure 25) reads on the feature that *collects the user information* (column 41 line 65) *based on an appearance frequency of a word* (column 42 line 65) *contained in the speech recognition result* (column 18 lines 30-40).

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Von

Kohorn to the device/method of Cox, Jr. or Herz *et al*'195 so as to apply the tools developed for amusement gaming to further the marketing interests of those products that sponsors such gaming programs.

11. Regarding claim 16 and 28; the claims are set forth with the same features as claims 12 and 24, respectively. Neither Cox, Jr. nor Herz *et al*'195 deal with *broader terms for a word.* Von Kohorn (column 42 lines 30-32) reads on the feature that *said collecting means collects the user information based on a broader term of a word contained in the speech recognition result,* which would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Von Kohorn to the device/method of Cox, Jr. or Herz *et al*'195 to recognize the use of general terms in specifying equivalent or like items.

Cox, Jr., Herz *et al*'195 & Hammons *et al*

12. Claims 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, Jr. in view of Herz *et al*'195 and further in view of Hammons *et al* (U.S. Patent 6,477,509 B1).

13. Regarding claims 17 and 29; the claims are set forth with the same features as claims 12 and 24, respectively. While Cox, Jr. maintains a record of the products in use by the customer; neither Cox, Jr. nor Herz *et al*'195 further maintain *information indicating interests or taste.*

Hammons *et al* (42 in figure 2) reads on the feature that *the user information is information indicating interests or tastes of the user,* which would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Hammons *et al* to the device and/or method of Cox, Jr. or Herz *et al*[195] to improve marketing by *presenting material of consumer interest.*

Allowable Subject Matter

14. Claims 18-23 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter:

- The present invention is directed to *extracting survey information from conversation.*
- Claim 18 identifies the distinct feature that gives higher consideration to the time spent on a particular subject by "*collecting user information tracks when the same topic is included in the speech for a designated length of time and collects the user information based on the designated length of time*".
- The closest prior art of Cox, Jr. and Hammons *et al* discloses collecting specific information determined in response to direct queries on the subject, but fails to anticipate or render the above underlined limitations obvious.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Vassiliadis *et al* (U.S. Patent 5,384,894 A) fuzzy reasoning database question answering system considers topical frequency in evaluations.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Nolan whose telephone number is (703)305-1368. The examiner can normally be reached on Mon, Tue, Thu & Fri, from 7 AM to 5 PM. If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached at (703)305-9645.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)217-9197 (toll-free).

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions, or mailed to:

P.O. Box 1450
Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,
2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan
Examiner
Art Unit 2654

DAN/d
October 7, 2004

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER